

# Comparisons of Job Characteristics

**Focus Occupation:** [Engine and Other Machine Assemblers \(51-2031\)](#)

**Associated Occupation:** [Mobile Heavy Equipment Mechanics, Except Engines \(49-3042\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

**Focus Occupation:** Engine and Other Machine Assemblers (51-2031)

**Associated Occupation:** Mobile Heavy Equipment Mechanics, Except Engines (49-3042)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	23.6	14.7	<< Extensive education and/or training may be required
Engineering and Technology	5.7	10.2	5.6	<< Extensive education and/or training may be required
Physics	4.3	7.9	3.2	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 82

**Focus Occupation:** Engine and Other Machine Assemblers (51-2031)

**Associated Occupation:** Mobile Heavy Equipment Mechanics, Except Engines (49-3042)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Troubleshooting	4.5	13.6	8.0	<< Extensive development of skills in this area may be required
Repairing	3.4	13.2	8.1	<< Extensive development of skills in this area may be required
Equipment Maintenance	3.5	12.9	7.9	<< Extensive development of skills in this area may be required
Operation Monitoring	6.6	11.9	10.3	< A higher skill level may be required
Quality Control Analysis	5.9	11.9	10.1	< A higher skill level may be required
Operation and Control	5.4	10.8	8.1	<< Extensive development of skills in this area may be required
Equipment Selection	3.3	9.3	5.5	<< Extensive development of skills in this area may be required

Management of Material Resources	3.7	6.4	2.5	<<	Extensive development of skills in this area may be required
Installation	1.7	6.0	3.1	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 92			
Focus Occupation: Engine and Other Machine Assemblers (51-2031) Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Control Precision	6.6	13.9	10.1	<<	Extensive improvement in abilities may be required
Multilimb Coordination	6.0	13.5	10.0	<<	Extensive improvement in abilities may be required
Extent Flexibility	4.8	13.4	9.6	<<	Extensive improvement in abilities may be required
Manual Dexterity	6.5	13.0	10.3	<	Some improvement in abilities may be required
Finger Dexterity	7.6	12.9	10.6	<	Some improvement in abilities may be required
Visualization	7.5	12.2	10.7	<	Some improvement in abilities may be required
Reaction Time	4.8	11.4	9.1	<	Some improvement in abilities may be required
Hearing Sensitivity	5.6	11.0	8.5	<<	Extensive improvement in abilities may be required
Response Orientation	4.0	9.4	4.1	<<	Extensive improvement in abilities may be required
Sound Localization	2.2	5.8	2.8	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 93
Focus Occupation: Engine and Other Machine Assemblers (51-2031) Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Align or adjust clearances of mechanical components or parts	72	
Assemble gear systems	92	
Assemble, dismantle, or reassemble equipment or machinery	70	
Conduct tests to locate mechanical system malfunction	71	

Diagnose mechanical problems in machinery or equipment	65
Fabricate, assemble, or disassemble manufactured products by hand	11
Lubricate machinery, equipment, or parts	59
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Operate crane in construction, manufacturing or repair setting	76
Operate hoist, winch, or hydraulic boom	34
Operate vehicle engine electrical system test equipment	84
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read schematics	34
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or replace malfunctioning or worn mechanical components	62
Set up and operate variety of machine tools	62
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use combination welding procedures	68
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use machine tools in installation, maintenance, or repair	72
Use precision measuring devices in mechanical repair work	61
Use soldering equipment	44
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 87

**Focus Occupation: Engine and Other Machine Assemblers (51-2031)**

**Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)**

Tools and Technologies	Exclusivity
Computers	1
Data management and query software	1
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Length and thickness and distance measuring instruments	2

Lifting equipment and accessories	3
Machine tools	7
Power tools	2
Prying and bending tools	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vehicle servicing equipment	43
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.